

17730

S/080/61/034/008/014/018
D204/D305

Heating power and combustibility...

1) "Flame tube" test (Ref. 7: S.I. Taubkin, Osnovy ognезashchity tsellyuloznukh materialov (Fundamentals of Fire Protection of Cellulose Materials), Izd. Min. konn. khoz. RSFSR, M., 1960); 2) Ignition and self-ignition temperatures were determined. It was found that the heating power of polyesters decreases if chlorine is introduced into the composition. Chlorine also decreases their inflammability. Calculations of the theoretical combustion temperature or the heating power can be used for the preliminary comparative estimate of the inflammability of polymers as well as of other organic compounds. There are 3 tables and 7 Soviet-bloc references.

SUBMITTED: March 20, 1961

Card 4/4

BLOSHTEYN, I.I., KOMAROV, A.I.; LEVIT, L.B.; FLIS, I. Ye.

Pilot plant for the production of chlorine dioxide.
no.4:6-10 Ap '61. (Chlorine oxide)

Bum.prom. 36
(MIRA 14:5)

FILE, I.Ye.

Konstantin Pavlovich Mishchenko; on the sixtieth anniversary
of his birth. Izv. vys.ucheb.zav.;khim.i khim.tekh. 4 no.3:339-
344 '61. (MIRA 14:10)

(Mishchenko, Konstantin Pavlovich, 1901-)

FLIS, I.Ye.; BYNYAYEVA, M.K.

Oxidation potentials dependence on the pH in solutions of permanganate, chlorate, bichromate-chromate, and hydrogen peroxide. Zhur. fiz. khim. 35 no.5:1003-1009 My '61.
(MIRA 16:7)

1. Leningradskiy tekhnologicheskij institut.
(Electrochemistry) (Oxidation)

FLIS, I.Ye., doktor khimicheskikh nauk; TUMANOVA, T.A., kand.khimicheskikh nauk

Improving the performance of glass electrodes in the alkaline zone
at temperatures from 10° to 50°. Trudy LTITSBP no.11:99-102 '62.
(MIRA 16:10)

FLIS, I.Ye., doktor khimicheskikh nauk; MISHCHENKO, K.P., doktor khimicheskikh nauk; TUMANOVA, T.A., kand.khimicheskikh nauk

Thermochemical study of the reduction reaction of chlorine dioxide and chlorine with sulfuric anhydride in water solutions at various temperatures. Trudy LTITSBP no.11:94-98 '62. (MIRA 16:10)

VOROB'YEV, I.M., inzh.; FLIS, I.Ye., doktor khim. nauk

Electrochemical behavior of titanium in hypochlorite solutions.
Trudy LTITSBP no.11:103-110 '62. (MIRA 16:10)

PUSENOK, G.I., inzh.; FLIS, I.Ye., doktor khim.nauk; MISHCHENKO, K.P.,
doktor khim. nauk; BYNYAYEVA, M.K., kand.khim. nauk

Spectrophotometric method for studying the equilibrium of the
dissociation of hypobromous acid in aqueous solutions. Trudy
LTITSBP no.11:118-123 '62. (MIRA 16:10)

ARKHIPOVA, G.P., inzh.; FLIS, I.Ye., doktor khim.nauk; MISHCHENKO, K.P.,
doktor khim.nauk

Thermochemical study of the reduction of potassium chlorate by
sulfite in an acid medium. Trudy LTITSBP no.11:124-127 '62.

Spectrophotometric analysis of acid sulfite solutions. 128-133
(MIRA 16:10)

FLIS, I.Ye.; MISHCHENKO, K.P.; SALNIS, K.Yu.

Study of the equilibrium $\text{ClO}_3^- + \text{Cl}^- + 2\text{H}^+ \rightleftharpoons \text{ClO}_2 + 0.5\text{Cl}_2 + \text{H}_2\text{O}$ at
various temperatures. Zhur.prikl.khim. 35 no.3:667-669 Mr
'62. (MIRA 15:4)

(Chlorine oxides) (Phase rule and equilibrium)

KUSTODINA, V.A.; MISHCHENKO, K.P.; FLIS, I.Ye.

Thermodynamics of formation of chlorine monoxide in carbon
tetrachloride. Zhur.prikl.khim. 35 no.6:1374-1376 Je '62.
(MIRA 15:7)
(Chlorine oxides) (Carbon tetrachloride)
(Heat of formation)

BARAM, A.A.; KOKUSHKIN, O.A.; MISHCHENKO, K.P.; FLIS, I.Ye.

Laboratory study of the extraction of a complex catalyst from
polyethylene dispersions by methanol in rotary apparatus.
Plast. massy no.8:7-11 '63. (MIRA 16:8)

(Polyethylene)

(Catalysts)

BARAM, A.A.; KOKUSHKIN, O.A.; MISHCHENKO, K.P.; FLIS, I.Ye.; ARKHIPOVA,
Z.V.; VAVILOVA, I.I.; MONAKHOVA, Ye.V.; SHCHUTSKIY, S.V.

Recovery of complex catalysts from dispersions of polyethylene
by means of methanol in a rotary apparatus. Plast. massy
no.11:58-59 '63. (MIRA 16:12)

FLIS, I.Ye.; VOROB'YEV, I.M.

Use of titanium electrode in the quinhydrone method of determination of pH of solutions. Zav.lab. 29 no.5:538-540 '63. (MIRA 16:5)

1. Leningradskiy tekhnologicheskoy institut tsellyulozno-bumazhnoy promyshlennosti.

(Quinhydrone) (Electrodes, Titanium)
(Hydrogen-ion concentration) (Potentiometric analysis)

OSINSKA-TANEVSKA, S.M.; BYNYAYEVA, M.K.; MISHCHENKO, K.P.; FLIS, I.Ye.

Spectrophotometric determination of the constants of dissociation
of hypochlorous acid at various ~~temperatures~~. Zhur.prikl.khim:
36 no.6:1212-1217 Je '63. (MIRA 16:8)
(Hypochlorous acid) (Dissociation) (Spectrophotometry)

FLIS, I.Ye.

Some problems included in the mechanism of oxidation in
hypochlorite. Zhur. prikl. khim. 36 no.8:1669-1675 Ag '63.
(MIRA 16:11)

FLIS, I.Ye. (Leningrad); VOROB'YEV, I.M. (Leningrad); Primal uchastiye
VERT, Zh.L. (Leningrad)

Kinetic studies of processes taking place on the platinum electrode
in hypochlorite solutions. Zhur.fiz.khim. 37 no.8:1805-1812 Ag
'63. (MIRA 16:9)

1. Leningradskiy tekhnologicheskii institut tsellyulozno-bumazhnoy
promyshlennosti.

(Electrodes, Platinum) (Hypochlorites)

140-55 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RFL WW/RM
AP004629R S10191 64 000 1100000000

AUTHOR: Flis, I. Ye. (Deceased); Tumanova, T. A.; Grad, N. M.; Al'shits, I. M.
Dmitriyeva, A. N.

TITLE: Effect of water on polyester resins and glass plastics based on them

SOURCE: Plasticheskiye massey, no. 10, 1964, 33-36

TOPIC TAGS: polyester resin, polyester maleate, polyester maleate acrylate, binder, resin, glass plastic, artificial sea water, washing out, salt, polyacrylic resin, glass plastic mechanical property

ABSTRACT: The behavior of glass plastics based on polyester maleate (PN-3) and polyester maleate acrylate (MA-3) binders in artificial sea water was investigated. The "sea water" was prepared by dissolving different amounts of chemically pure salts (NaCl, MgCl₂, MgSO₄, KCl, NaHCO₃) as tabulated. The water was filtered and the pH and concentration of all ions were determined. The preparation of the polyester resins and glass plastics based on them is also described. The water absorption of hardened resins and glass plastics was then determined. The experimental data indicate that the resin and glass plastic samples adsorb HCO₃ ions

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L 35469-65

ACCESSION NR: AP4046898

from the water, almost the total amount of bicarbonate being extracted during the first 2-3 months. Resin PN-3 does not change the Cl^- concentration of the "sea water", whereas the Cl^- ions are washed out from glass plastic. This phenomenon (to a smaller extent) is also characteristic for resin MA-3 and the glass plastic based on it. The concentration of sulfate ions in sea water does not change, and SO_4^{2-} ions are washed out more rapidly from glass plastic based on MA-3 than from the MA-3 glass plastics. The Ca^{++} concentration in sea water varies slightly after resins are kept in it. The data obtained on the variation of Mg^{++} and K^+ ions in sea water do not permit a safe conclusion as to the tendency toward their absorption and washing out by the samples, because the absolute values of the changes lie within the range of possible analytical errors. The resins definitely do not cause the Na^+ ion concentration to change in sea water. Glass plastics based on resin PN-3 show a tendency to washing out of Na^+ ions after 20 days in the water; thereafter, the absorption of Na^+ ions by the samples is noticed. The same tendency to a less pronounced washing out of Na^+ ions is observed for glass plastics based on MA-3 resin. The effect of sea water on the mechanical properties of resins and glass plastics shows that the bending strength and impact toughness change more significantly for PN-3 resin and its

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ACCESSION NR: AP4046898

glass plastics than for MA-3 and its glass-plastics. "Thanks are due to L. A. Gladkaya and O. A. Mudrov for making the samples, and to G. N. Zubova for carrying out the analyses." Orig. art. has: 2 tables and 6 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 010

OTHER: 008

Card 3/3

ARAKHLOVA, G.P.; FLIS, I.Ye.; MISHCHENKO, K.P.

Potentiometri: determination of the $\text{HSO}_3^- \rightleftharpoons \text{SO}_3^{2-} + \text{H}^+$ equilibrium
within 10-50° temperature range. Zhur. prikl. khim. 37 no.10:
2306-2309 0 '64. (MIRA 17:11)

DOBRYSHIN, K.D.; FLIS, I.Ye.; FISH, S.I.

Study of the dissolution processes of chlorine dioxide and
chlorine in the formation of bleaching solutions. Zhur. prikl.
khim. 37 no.11:2382-2387 N '64 (MIRA 18:1)

FLIS, I.Ye.

Analysis of some processes in the preparation of sulfite cooking
solutions. Trudy LTITSBP no.13:52-56 '64.

(MIRA 18:2)

FLIS, I.Ye.; TUMANOVA, T.A.; ZUBOVA, G.M.; NIKITINA, N F.

Methodology of the analysis of the mineral composition of natural water. Trudy LTITSBP no.13:57-61 '64.

Water absorption and ion adsorption from the aqueous electrolyte solutions by some polyester resins and glass reinforced plastics made on their base. Ibid.:62-67 (MIRA 18:2)

FLIS, I.Ye.; TUMANOVA, T.A.; ZUBOVA, G.M.

Potentiometric analysis of chlorine dioxide and chlorite in
aqueous solutions. Trudy LTITSBP no.13:68-71 '64.

Potentiometric determining of sulfur dioxide in aqueous solutions.
Ibid.:72-74 (MIRA 18:2)

FLIS, I.Ye.; SHIROKOVA, V.N.; DONSKAYA, Ye.V.

Potentiometric titration in the presence of hydrogen peroxide
with the use of a platinum electrode. Report No.1. Trudy LTITSBP
no.13:75-77 '64. (MIRA 18:2)

FLIS, I.Ye.; ZOLOTUKHIN, V.M.

Oxidative potentials of titanium electrodes in the solutions of
chlorine dioxide and some other oxidants. Trudy LTITSBP no.13:78-
82 '64. (MIRA 18:2)

BERNARDELLI, A.Ye.; TOMANOVA, T.A.; FLIS, I.Ye.

Automatic adiabatic calorimeter. Trudy IZTISBP no.14:166-170 '64.
(MIRA 18:5)

L 58368-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/ENP(j)/T Pc-4/Pr-4/Ps-4/Pt-7 WW/CM

ACCESSION NR: AP5018041

UR/0191/65/000/007/0046/0048
678.744+678.744.06-419:677.521.019.32:01:539.4

AUTHOR: (Flis, I. Ye. (Deceased); Tumanova, T. A.; Grad, N. M.; Al'shits, I. M.;
Dmitriyeva, A. R.

TITLE: Effect of water on fire-resistant polyester resins and glass-reinforced
plastics based on them

SOURCE: Plasticheskiye massy, no. 7, 1965, 46-48

TOPIC TAGS: self extinguishing plastic, polyester, glass reinforced plastic, sea
water

Effect of sea water on the fire resistance of certain self-extinguishing
plastics

... "sea"-water cations, and of changes in the physical and mechanical properties and
fire resistance of the materials. It was found that "sea" water has a lesser effect

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I 58368-65
ACCESSION NR: AP5018041

on the physical and mechanical properties of resin I and the GRP based thereon than on those of resin II and its GRP. This was explained in terms of a difference in intermolecular interaction due to peculiarities of the composition and chemical structure of the polymers. As to self-extinguishing properties, it was found that after six months of exposure to "sea" water at 20C these properties were not impaired. Orig. art. has: 4 figures and 1 table. [SM]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 008

OTHER: 003

ATD PRESS: 4047

Card 2/2

FLIS, I. I.; ARKHIPOVA, G. P.; MISHCHENKO, K. P.

Equilibria in aqueous solutions of sulfites at temperatures of 10 - 35°.
Zhur. prikl. khim. 38 no. 7: 1494-1500 J1 '65. (MIRA 18:7)

FLIS, I.Y.

Thermodynamics of the processes and equilibrium in bleaching solutions of chlorine and hydrogen peroxide compounds at various temperatures. Report No.1. Trudy LTITSBP no.12:18-36
'4.

Kinetics and mechanism of oxidative processes in bleaching solutions of chlorine compounds. Report No.2. Ibid.:37-49
(MIRA 18:8)

FLIS, I.Ye.; VOROB'YEV, I.M.

Electrochemistry of the oxidation-reduction processes in bleaching solutions and some other systems. Report No.3. Trudy LTITSBP no.12:50-64 '64.

Mechanism of oxidation potentials in the bleaching solutions of hypochlorites on platinum and titanium electrodes. Report No.4. Ibid.:65-81 (MIRA 18:8)

BARAM, A.A.; MISHCHENKO, K.P., doktor khim.nauk, prof.; FLIS, I.Ye.

Mechanism, kinetics and intensification of the processes of
admixture extraction from polymer dispersions. Trudy LTITSBP
no.12:82-94 '64. (MIRA 18:8)

FLIS, Janusz, mgr inż., st. asystent

Properties of filamentary crystals. Wiad chem 17 no. 6:353-368
Je '63.

1. Zakład Fizykochemii Procesów Elektrodowych, Instytut Chemii Fizycznej, Polska Akademia Nauk, Warszawa.

FLIS, Janusz, mgr inz., st. asystent

Growth of filamentary crystals. Wiad chem 17 no. 5: 273-287
My '63.

1. Zaklad Fizykochemii Procesow Elektrodowych, Instytut Chemii
Fizycznej, Polska Akademia Nauk, Warszawa.

FLIS, J.

Electrical resistance of hydrogen-charged wild steel wires and iron whiskers. Bul chim PAN 12 no.11:809-815 '64.

1. Institute of Physical Chemistry of the Polish Academy of Sciences, Warsaw. Submitted September 23, 1964.

FLIS, J.

"The Voice of a Geographer About the Statue on the Mountain Tourism Decoration." P. 10,
(TURYSTA, No. 1, Jan. 1953, Warszawa, Poland.)

SO: Monthly List of East European Accessions, (HEAL), LC, Vol. 3,
No. 12, Dec. 1954, Uncl.

FLIS, JAN

Kras gipsowy Niecki Nidzińskiej. Warszawa, Państwowe Wydawn. Naukowe, 1954. 73 p.
(Polska Akademia Nauk. Instytut Geografii. Prace geograficzne, nr. 1) /Gypsum
region of Niecka Nidzińska. illus./

MIU

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 9, Sept. 1955
Uncl.

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413320018-9

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413320018-9"

FLIS, J.

FLIS, J. A geophysical sketch of the Nida River Basin; the main features situation boundaries, and area of the region. p. 213

Vol. 27, no. 2 1956
CZASOPISMO, GEOGRAFICZNE
GEOGRAPHY & GEOLOGY
Wroclaw, Poland

So: East European Accession, vol, 6, no. 3, March 1957

FLIS, J.

Przegladowa mapa swiata (World Map in Outline); a review

F. 83 (PRZEGLED GLOBI ZYJNY) Poland, Vol. 13, No. 2, Feb. 1957

SO: Monthly Index of European Accessions (AEEI) Vol. 6, No. 11, November 1957

DOBROWOLSKA, Maria, prof. dr; FLIS, Jan, doc. dr.; MOCHNACKI, Rodion, doc. dr

Works of the geographical departments of the Teacher's College in
Krakow during the 20-year period of the Polish People's Republic.
Przegl geogr 36 no.3:603-606 '64.

FLIS, J.; JANKO, A.

X-ray study of the effect of charging iron whiskers with hydrogen. Bul Chim PAN 12 no. 1:51-55 '64.

1. Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw. Presented by M. Smialowski.

FLIS, Michal

Survey of the contents of the Department of Legacies of the
Archives of the Polish Academy of Sciences. Kwart hist nauki
i tech 8 no.1:152-156 '63.

BURCHINSKIY, G.I., prof.; NOVIK, I.O., prof.; FLIS, S.A.; MAKLAKOVA, P.N.

Significance of focal infection of the oral cavity in the development
of cardiovascular diseases. Vrach. delo no.10:26-33 U '61.
(MIRA 14:12)

1. Kafedra terapii (zav. - prof. G.I.Burchinskiy) i terapevticheskoy
stomatologii (zav. - prof. I.O.Novik) stomatologicheskogo fakul'teta
Kiyevskogo meditsinskogo instituta imeni akademika A.A.Bogomol'tsa.
(MOUTH-SEPSIS) (CARDIOVASCULAR SYSTEM-DISEASES)

FLIS, S.P.

Employing comprehensive calculations. Stroi. truboprov. 8 no.12:
34-35 D '63. (MIRA 17:4)

1. Trest Ukgazneftestroy, Kiyev.

FLIS, Ye., doktor khim. nauk; PUSENOK, G.I., inzh.; BUNYAYEVA, M.K., kand.
khim.nauk

Potentiometric method for the analysis of hypobromite aqueous
solutions. Trudy LTITSBP no.11:111-117 '62. (MIRA 16:10)

Elis, Z. A.

Elis, Z. A. -- "Clinical Aspects and Treatment of Ulcerous Gingivostomatitis."
Kiev Order of Labor Red Banner Med Inst imeni Academician A. A. Bogomolets,
Kiev, 1955 (Dissertation for the Degree of Candidate of Veterinary Sciences)

SO: Krizhnaya Letopis', No. 24, Moscow, Jun 55, pp 91-104

FLIS, Z.A., kandidat meditsinskikh nauk (Kiyev)

Clinical aspects of ulceromembranous gingivostomatitis. Probl.
stom. 3:231-235 '56 (MLRA 10:5)
(GUMS--DISEASES) (MOUTH--DISEASES)

FLIS, Z.A.

Treatment of nonspecific ulcers of the mucous membrane of the oral cavity. Stomatologia 36 no.4:30 J1-Ag '57. (MIRA 10:11)

1. Iz kafedry terapevticheskoy stomatologii (zav. - doktor meditsinskikh nauk I.O.Novik) Kiyevskogo meditsinskogo stomatologicheskogo instituta
(MOUTH--ULCERS)

FLIS, Z.A., kand.med.nauk (Kiyev)

Frequency of paradentosis in patients with internal diseases.

Probl.stom. 4:189-194 '58.

(MIRA 13:6)

(GUMS--DISEASES)

FLIS, Z.A., kand.med.nauk (Kiyev); DATSENKO, O.G., kand.med.nauk (Kiyev)

Agglutination reaction with blood serum and with the saliva of
paradentosis patients in the process of treatment. Probl.stom.
4:289-294 '58. (MIRA 13:6)
(AGGLUTINATION) (SALIVA) (GUMS--DISEASES)

DATSENKO, O.G., kand.med.nauk (Kiyev); FLIS, Z.A., kand.med.nauk
(Kiyev)

Phagocytic reaction in treatment of patients with paradentosis.
Probl.stom. 4:295-299 '58. (MIRA 13:6)
(GUMS--DISEASES) (PHAGOCYTOSIS)

FLIS, Z.A.

Use of a microbicidal novocaine solution among other drugs for the local treatment of the inflammatory-dystrophic form of pyorrhea alveolaris. Probl. stom. 5:57-62 '60. (MIRA 15:2)

1. Kiyevskiy meditsinskiy institut.
(GUMS___DISEASES) (BACTERICIDES) (NOVOCAINE)

FLIS, Z.A.

Treatment of ulcerative gingivostomatitis with penicillin-novocaine
solution. Probl. stom. 5:417-421 '60. (MIRA 15:2)

1. Kiyevskiy meditsinskiy institut.
(STOMATITIS) (PENICILLIN) (NOVOCAINE)

SARZHEVSKAYA, L.A. (Kiyev); FLIS, Z.A. (Kiyev)

Functional characteristics of salivary gland activity in
paradentosis. Probl.stom. 6:61-65 '62. (MIRA 16:3)
(GUMS—DISEASES) (SALIVARY GLANDS)

FLISEK, Tadeusz, mgr inż.

System problems of telephone exchanges. Przegl telekom 35
[1. o. 36] no.2:37-46 F '63.

1. Wydzielone Biuro Rozwojowe T-2 Oddział Gdansk.

FLISEK, Tadeusz, mgr inz.

General characteristics of the MCA-D automatic telephone crossbar exchange system designed in Telephone Equipment Plant T-2.
Przeegl telekom 36 [i.e. 37] no. 5:146-152 My '64.

1. Detached Development Office T-2, Gdansk Branch, Telephone Equipment Plant.

L 32786-64

ACC NR: AP6023800

SOURCE CODE: PO/0022/65/000/008/0236/0243

AUTHOR: Flisek, Tadeusz (Master engineer)

ORG: Special Development Bureau T-2, Gdansk Branch, Gdansk (Wydzielone Biuro Rozwojowe T-2, Oddzial Gdanski)

TITLE: Control devices in the automated central telephone office of the crossbar system

SOURCE: Przegląd telekomunikacyjny, no. 8, 1965, 236-243

TOPIC TAGS: telephone equipment, telephone system

ABSTRACT: The article describes the construction and operational features of control equipment for positioning selectors of various stages of commutation. The main function of this equipment is to receive and retain dialling information, to search for the proper trunks and subscribers, also to actuate the necessary selectors. Such control assemblies are either individual for one crossbar selector (Standard Elektrik Co. in West Germany), or graduated and common for one or several commutation units (Ericsson Co. in Sweden and CGCT in France), or centralized making connections within the entire office (Bell Co. in USA). The model developed in Poland is of the second type (MCA-O) and this one is described in detail. Its components are a subscriber register and various types of discriminators for making connections. Operation on incoming traffic and in outgoing traffic is described, also in the group stage and in the register stage. Some typical services are explained, e.g. connection between common subscribers, interurban, special-purpose and coordination between rural and subscriber stations. Orig. art. has: 8 figures. [JPRS]

SUB CODE: 17 / SUBM DATE: none

Card 1/1 7/25

UDC: 621.395.34

0915

16 26

GOL'DFEL'D, M.L.; FLISFEDER, B.M.

The OF-46 program-controlled jig-boring machine. Biul.tekh.-ekon.
inform.Gos.nauch.-issl.inst.nauch.i tekhn.inform. no.9:35-38
'62. (MIRA 15:9)

(Drilling and boring machinery)

PIAKIDA, A.; FLISFEDER, M.

In response to the article by N.P. Baguzov and N.M. Igoshin.
Prom. stroi. 39 no.11:45 '61. (MIRA 14:12)
(Industrial organization)

PLAKIDA, A.K., inzh.; LOGACHEV, V.F., inzh.; FLISFEDER, M.R., inzh.

Introduction of the multiple machining of parts. Mashinostroenie
no.2:3-9 Mr-Ap '62. (MIRA 15:4)

1. Proyektno-konstruktorskiy tekhnologicheskiy institut Odesskogo
sovnarkhoza.

(Factory management) (Metal cutting)

PLAKIDA, A. K., inzh.; BURDA, I. Kh., inzh.; POCHKIN, Ye. G., inzh.;
FLISFEDER, M. R., inzh.

Semiautomatic line for painting articles in an electrostatic
field and heat-radiation drying. Mashinostroenie no.5:72-73
S-0 '62. (MIRA 16:1)

1. ~~Proyektno-konstruktorskiy~~ tekhnologicheskiy institut
Odesskogo soveta narodnogo khozyaystva,

(Painting, Industrial—Equipment and supplies)
(Drying apparatus)

FLISEK, J.

A few remarks concerning the typical design of a boiler plant
with two La Mont-type boilers (2x2, 5.10⁶kcal/h). p. 271. Gaz, Woda I
Technika Sanitarna.

SOURCE: East European Accessions (EEAL), LC, Vol. 5, no. 3, March 1956.

FLISEK, J.

A new type of frame for a unit heater. p. 95.

GAZ, WODA I TECHNIKA SANITARNA. (Stowarzyszenie Naukowo-Techniczne Inżynierów i Techników Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa, Poland.
Vol. 33, no. 3, March 1959.

Monthly List of East European Accessions EEAI LC, Vol. 9, no. 7, July 1959

Uncl.

ITICOVICI, M.; BRAUNER, E.; FLISS, A.; CUCIUREANU, G.; NICOLAE, G.;
MORUZI, H.

Two cases of anthrax infection with pharyngeal localization.
Rev. igiena microb. epidem., Bucur. No.2:60-63 Apr-June 54.

(ANTHRAX

pharyngeal, case reports)

(PHARYNX, dis.

anthrax, case reports)

FLISS A. Sec.11 Vol.10/10 Oto-Rhino-Laryngo Oct57

1882. FLISS A., POMERANTZ D., DĂNILĂ N. and LAZĂR M. Sect. de Oto-rino-laringol., Spit. Reg., Iași. *Studiu cu privire la patogenia și tratamentul formelor de rinită și sinuzită cazeoasă. A study on the pathogenesis and treatment of caseous rhinitis and sinusitis OTORHINO-LARING. (București) 1957, 2/1 (26-34) Illus. 3

Caseous sinusitis as well as all the other types of sinusitis, are produced by the same nasal odontogenous routes. Caseous sinusitis results from necrosis of the mucosa of the sinus, after passing through a hyperplastic stage, owing to continuous irritation caused by the chronic suppurative process in the sinus with bacteria of very low virulence. In instances of pure caseous sinusitis, histopathological examination shows extensive areas covered by a fibro-sclerous tissue which are considered to be characteristic of these types. Treatment of caseous sinusitis should begin by irrigations of the diseased sinus. The authors consider caseous rhinitis to be a separate morbid entity.

EXCERPTA MEDICA Sec 11 Vol 11/11 O. R. L. Nov 58

1992. A STUDY OF THE ANATOMO-CLINICAL FORMS AND OF THE PATHO-
GENESIS OF FRONTO-ETHMOID MUCOCELE - Etude sur les formes anatomo-
ocliniques et la pathogénie de la mucocèle fronto-ethmoïdale - Fliss A.,
Wasserman L., Buiuc S. and Ostap B. Jasay, Roumanie - ANN.
OTO-LARYNG. (Paris) 1957, 74/12 (947-955) illus. 8

On the basis of the clinical and anatomic-pathological findings in 9 cases of fronto-ethmoid mucocèle cured at different stages of their development, a personal theory is advanced concerning the pathogenesis of this affection. It is thought that an initially inflammatory process establishes itself slowly; it invades the whole mucosa of the sinus and is followed by stenosis or even obliteration of the nasosinusal orifice leading to the isolation of the sinus; once the cavity is closed the inflammatory process becomes chronic, and autosterilization takes place, mostly spontaneously. Morphological study reveals a whole range of variations of lesions, but the chronological succession from one stage to another justifies the supposition that the different anatomoclinical forms represent the development of one and the same disease.

FLISSKIY, M.M.; VESELOVSKAYA, I.Ye.; DZHAGATSPANYAN, R.V.

Destruction of graphite anodes in the electrolysis of sodium chloride
in the presence of sulfate ions. Zhur. prikl. khim. 33 no.8:1901-1903
Ag '60. (MIRA 13:9)

(Electrodes, Carbon)

(Electrolysis)

(Salt)

FLISSKIY, M.M.; VESELOVSKAYA, I.Ye.; DZHAGATSPANYAN, R.V.; CHERNYAVSKAYA, O.V.

Anodic process on graphite in the electrolysis of sodium chloride
in the presence of sulfate ions. Zhur.prikl.khim. 34 no.11:2483-
2487 N '61. (MIRA 15:1)

(Sodium chloride)
(Sulfates)

(Electrolysis)

VESELOVSKAYA, I.Ye.; FLISSKIY, M.M.; DZHAGATSPANYAN, R.V.; MOROCHKO, L.V.

Study of the adsorption of sulfate ion on a graphite anode
under conditions of chloride electrolysis. Zhur. prikl.
khim. 36 no.10:2179-2183 0 '63. (MIRA 17:1)

KUCHINSKIY, Ye.M.; LIPIKHIN, N.P.; FLISSKIY, M.M.

Study of the porous structure of graphite electrodes. Zhur.
prikl. khim. 37 no.2:460-462 F '64.

(MIRA 17:9)

541.138.2.546

AUTHOR: Flisskiy, M. M.; Surova, L. M.

Study of the anodic process during electroplating of copper.

Zh. Elektrokhimii, v. 1, no. 8, 1965, 1405-1406.

Keywords: ozone, electrochemistry, anodic oxidation, copper.

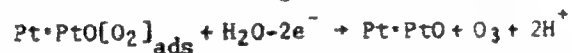
Abstract: This investigation was undertaken because of the importance of the mechanism of the anodic process during formation of a protective film on the surface of the electrode.

End 10

010050-05

ACCESSION NR: AP5020390

The anode potential must be raised to 3.1 v (corresponding to current density of 10 mA/cm²) for production of ozone on platinum. This indicates a significant change in this electrode reaction. It is believed that peroxide and superoxide are formed on the platinum surface at lower potentials. At higher potentials, the peroxide type. Ozone is formed by oxidation of water molecules according to the reaction



Thus, the kinetics and the mechanism of the anodic process on platinum in perchloric acid solutions is apparently determined by the state of the platinum surface, which varies with the potential and the electrode temperature.

ASSOCIATION: none

DATE: 08Feb65

ENCL: 01

REF: 100, 100

OTHER: 005

OTHER: 003

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ACCESSION NR: AP5020390

ENCLOSURE

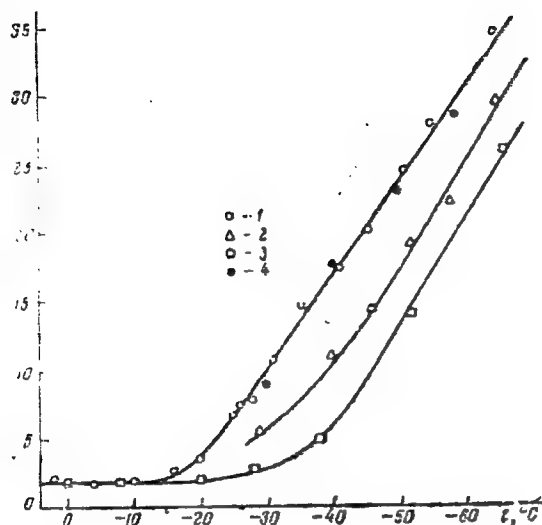


Fig. 1. Current efficiency for
hydrogen evolution on a platinum
electrode in a 10% HClO₄
solution when the current den-
sity is: 1--1 a/cm^2 , 2--2
2--2 a/cm^2 , 3--3 a/cm^2 ,
4--data of E. I. Lash, W. D.
Hornbeck and J. L. Purnham, *J.*
Electrochem. Soc., 46, 134
(1951), for 4 a/cm^2 .

Card 3/3

FLISSKIY, M.M.; SUROVA, L.M.

Anodic process in the electrochemical formation of ozone and oxygen on platinum. Elektrokhimiia 1 no.8:1005-1008 Ag '65. (MIRA 18:9)

FLISSKIY, M.M.

Electrochemical behavior of ozone on platinum and gold
electrodes in the presence of chlorine ions. Elektrokimiia
1 no.11:1377-1380 N '65. (MIRA 18:11)

L 12890-00 EWI(m)/EIC(F)/EWG(m)/I/ENP(t)/ENP(b) IJP(c) JD/DS

ACC NR: AP5027582 (A) SOURCE CODE: UR/0364/65/001/011/1377/1380

AUTHOR: Flisskiy, M. M.

ORG: none

TITLE: Electrochemical behavior of ozone at platinum and gold electrodes in the presence of chloride ions 27 27 27

SOURCE: Elektrokimiya, v. 1, no. 11, 1965, 1377-1380

TOPIC TAGS: gold, platinum, ozone, reduction, electrochemistry, cathode polarization, electrode potential

ABSTRACT: In the presence of ozone a platinum electrode achieves a high oxidation potential but the jump in the potential of the ozone electrode has not been completely elucidated. The authors investigated this phenomenon, extending their study to include gold electrodes. The observed shift of the potentials of Pt and Au electrodes in the negative direction upon introduction of chloride ions into an acid solution saturated with ozone results from the interaction of surface oxides with chloride ions; oxychlorides and molecular chlorine form on the electrode surface. It was found that cathodic polarization of Pt and Au electrodes in acid solutions saturated with ozone leads to a reduction of the ozone to mo-

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UDC: 541.138.3:546

L 1/090-00

ACC NR: AP5027582

lecular oxygen. Apparently the reduction of ozone proceeds with the participation of oxychlorides as a result of which the maximum reduction current due to ozone is independent of the concentration of Cl^- ions. It was established that chloride ions have an inhibiting effect upon the reduction of oxygen. Orig. art. has: 4 figures.

SUB CODE: 07/ SUBM DATE: 08Feb65/ ORIG REF: 005/ OTH REF: 002

Card

2/2

HW

FLISSKIY, M.M.

Kinetics of the electrochemical oxidation of chlorine ions
on platinum in sulfuric acid solutions. Zhur. fiz. khim.
39 no. 1:186-189 Ja '65 (MIRA 19:1)

1. Submitted December 25, 1963.

GURTOVOY, Ya.M.; FLIT, I.A.

Organization of therapeutic occupational processes at a
district antituberculosis dispensary Probl. tub. 42
no.10:7-9 '64. (MIRA 18:11)

1. Protivotuberkuleznyy dispanser No.13 (glavnyy vrach Ya.M.
Gurtovoy), Moskva.

FINOGEYEV, Petr Vasil'yevich; FLIT, Izabella Borisovna; MENCHINSKIY, V.,
otv. red.

[Nonbudgeted revenues; rules for their formation and use]
Vnebiudzhetye sredstva; poriadok ikh obrazovaniia i is-
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RUSIN, Nikolay Petrovich, doktor geogr. nauk; FLIT, Liya Abramovna,
zhurnalist; POZHIDAYEVA, M., red.; MARAKASOVA, L.P., tekhn.
red.;

[Man' changes the climate] Chelovek meniaet klimat. Moskva,
Sovetskaia Rossiia, 1962. 128 p. (MIRA 16:3)
(Climatology)

FLIT, S. M.

FLIT, S. M. - st. nauchn. sotr. i POLYAKOV, A. A. - kand. tekhn. nauk i
KUDRYAVTSEV, O. K. - o. st. nauchn. sotr. GUREVICH, L. V. - Kand. tekhn.
nauk KHRUNOV, N. P. - Kand. tekhn. nauk

Akademiya kommunal'nogo khozyaystva im. K. D. Pamfilova

Osnovnyye Meropriyatiya po Obespecheniyu Bezopasnosti Dvisheniya V Gorodakh
Page 79

SO: Collection of Annotations of Scientific Research Work on Construction, completed
in 1950.
Moscow, 1951

FLIT, V. E.

"The Distribution and Ecological Role of Daur Pika Colonies in Tuva."

Tenth Conference on Parasitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

Institute of Epidemiology and Microbiology, AMS, USSR, Moscow

Flitman, L.M.

49-1-10/16

AUTHOR: Flitman, L.M.

TITLE: On a Boundary Problem for an Elastic Half-Space (Ob odnoy krayevoy zadache dlya uprugogo poluprostranstva)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 1, pp.105-106 (USSR)

ABSTRACT: It is known that any solution $\bar{u}(u, v, w)$ of the dynamic equations of the theory of elasticity:

$$(\lambda + \mu) \operatorname{grad} \operatorname{div} \bar{u} + \mu \Delta \bar{u} - \rho \frac{\partial^2 \bar{u}}{\partial t^2} = 0 \quad (\text{Eq.1})$$

can be put into the form:

$$\bar{u} = \operatorname{grad} \varphi + \operatorname{rot} \Psi, \quad \bar{\Psi} = \bar{\Psi}_1 + \bar{\Psi}_2 + \bar{\Psi}_3 \quad (\text{Eq'.2})$$

where:

$$\Delta \varphi - \frac{1}{a^2} \frac{\partial^2 \varphi}{\partial t^2} = 0, \quad a = \sqrt{\frac{\lambda + 2\mu}{\rho}} \quad (\text{Eq'.3})$$

and:

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$$\Delta \bar{\varphi} - \frac{1}{b^2} \frac{\partial^2 \bar{\varphi}}{\partial t^2} = 0, \quad \text{div } \bar{\Psi} = 0, \quad b = \sqrt{\frac{\mu}{\rho}}. \quad (\text{Eq. 4})$$

Here u, v, w are the components of the displacement vector in a Cartesian system of coordinates, ρ is the density, λ and μ are the Lamé coefficients and a and b the velocities of longitudinal and transverse waves respectively. The converse is also true: if φ and $\bar{\Psi}$ satisfy Eqs. (3) and (4), then, Eq. (2) is a solution of Eq. (1). The difficulty in solving the boundary problems for Eq. (3) and Eq. (4) consists in that φ and $\bar{\Psi}$ enter into the boundary conditions in such a way that it is impossible to formulate the problem for φ and $\bar{\Psi}$ separately. However, for a plane interface there exist boundary conditions which can be separated into boundary conditions for φ and $\bar{\Psi}$ respectively with the help of Eqs. (3) and (4) and the initial conditions. These boundary conditions are $z = 0$

$$\sigma_{zz} = f_1(x, y, t), \quad u = f_2(x, y, t), \quad v = f_3(x, y, t) \quad (\text{Eq. 5})$$

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or:

$$\tau_{xz} = f_1(x, y, t), \tau_{yz} = f_2(x, y, t), w = f_3(x, y, t), \quad (6)$$

where σ_{22} , τ_{xz} , τ_{yz} are certain components of the stress tensor. It is shown that the boundary problem (Eq.(6)) can be transformed at $z = 0$ into the form:

$$\left. \begin{aligned} \frac{\delta \varphi}{\delta z} &= \alpha_1(x, y, t), \quad \phi_1 = \alpha_2(x, y, t), \\ \phi_2 &= \alpha_3(x, y, t), \quad \frac{\delta \phi_3}{\delta z} = \alpha_4(x, y, t) \end{aligned} \right\} \quad (11)$$

In transforming Eqs.(5) and (6) into the form of Eq.(11) it was assumed that φ and Φ have second order derivatives which are continuous up to the boundary. This is the case if the boundary is sufficiently smooth, the boundary and initial conditions are also sufficiently smooth and the coupling conditions between them are of sufficiently high order. It is therefore necessary that

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f_1 in Eqs.(5) and (6) should have continuous derivatives up to the fourth order; similar smoothness is required in the initial and coupling conditions. Separation of the boundary conditions leads to interesting physical consequences. It is possible to choose f_1 in such a way that when a longitudinal wave is incident on a plane boundary only the longitudinal wave will be reflected, and when a transverse wave is incident only the transverse wave will be reflected. Let, for example, $f_1 = 0$ and suppose that the initial excitation is purely longitudinal or purely transverse and occurs in the region which does not have common points with the boundary. In that case it follows from Eq.(11) that only longitudinal or only transverse waves will be reflected, i.e., the elastic body behaves like an ideal gas executing small oscillations.

ASSOCIATION: Ac. of Sc. USSR, Institute of Physics of the Earth.
(Akademiya Nauk SSSR, Institut Fiziki Zemli)

SUBMITTED: May 21, 1957.

AVAILABLE: Library of Congress.

Card 4/4

FLITMAN, L.M. (Moskva)

Mixed boundary problem for the wave equation. Prikl.mat. i mekh.
22 no.6:829-832 M-D '58. (MIRA 11:12)
(Differential equations, Partial)

Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics,
Moscow, 27 Jan - 3 Feb '60.

266. L. S. Kuznetsov (Sverdlovsk): Strain design and general stability of structures.
267. L. S. Kuznetsov (Sverdlovsk): A general method of solving boundary problems of structural mechanics.
270. R. D. Rogers (Moscow): A contribution to the non-linear problem of plate bending.
271. L. G. Ponomarev, L. P. Ushakov (Moscow): On the use of the method of moments in the approximate solution of some problems of plastic equilibrium.
272. A. I. Zhuravskiy (Kiev): Theoretical investigation of the stability of plates under the action of a uniform load.
273. A. A. Zhuravskiy (Moscow): Strength and visco-plastic flow of metals.
274. R. I. Zhuravskiy (Moscow): The relation between pure pressure and rate of creep of alloys.
275. L. A. Zhuravskiy (Kiev): Plastic strains of laminated composites.
276. A. A. Zhuravskiy (Moscow): Bending of metals by a spherical punch considering contact friction.
277. L. A. Zhuravskiy (Moscow): An asymptotic method of solving flexible bodies of variable pitch at high speeds of rotation.
278. R. I. Zhuravskiy (Moscow): Application of similarity methods to the analysis of the flow of rubber compounds.
279. L. A. Zhuravskiy, L. A. Zhuravskiy (Moscow): Impulsive deformation of a plate under a concentrated stress of aluminum-magnesium alloy in a circular hole.
280. A. A. Zhuravskiy (Moscow): An asymptotic method for the bending of laminated shells.
281. L. A. Zhuravskiy (Moscow): Some problems of soil dynamics.
282. L. A. Zhuravskiy (Moscow): The flow in the boundary layer of an elastic, visco-plastic medium.
283. A. A. Zhuravskiy (Moscow): Some problems concerning the stability of structures in a fluid flow.
284. A. A. Zhuravskiy (Moscow): On growth and rupture criteria for laminated composites.
285. L. A. Zhuravskiy (Moscow): Some problems of hydrodynamic stability.
286. L. A. Zhuravskiy (Moscow): Some problems of hydrodynamic stability.
287. L. A. Zhuravskiy (Moscow): The problem of elastic strength in thick composite-hydraulic structures.
288. L. A. Zhuravskiy (Moscow): Application of integral transformations to the solution of some problems concerning elastic media.
289. L. A. Zhuravskiy (Moscow): Deformations of plastic alloys in bending.
290. L. A. Zhuravskiy (Moscow): Elastic-plastic equilibrium of an elastic medium.
291. L. A. Zhuravskiy (Moscow): Stability and vibrations of laminated composites.
292. L. A. Zhuravskiy (Moscow): Bending of laminated composites.
293. L. A. Zhuravskiy (Moscow): Bending of laminated composites.
294. L. A. Zhuravskiy (Moscow): On the possibility of controlling the rate and non-linearly dependent location of rupture.
295. L. A. Zhuravskiy (Moscow): Some problems concerning the bending of plates and shells with stiffeners.
296. L. A. Zhuravskiy (Moscow): On the impact of a wave on a heavy plate supported in an elastic medium.
297. L. A. Zhuravskiy (Moscow): Some problems concerning the formation of hydraulic structures.
298. L. A. Zhuravskiy (Moscow): Present state and problems of plastic mechanics.
299. L. A. Zhuravskiy (Moscow): Flow conditions for saturated media.
300. L. A. Zhuravskiy (Moscow): Experimental study of real and apparent friction in vibrating soils.
301. L. A. Zhuravskiy, L. A. Zhuravskiy (Kiev): On the construction of a theory of the equilibrium problem of elastic media.
302. L. A. Zhuravskiy (Moscow): Further development of the initial boundary value problem.
303. L. A. Zhuravskiy (Moscow): Temperature stresses in multilayer plates and their effect on stiffness.

FLITMAN, L.M. (Moskva)

Effect of a seismic wave on the motion of a rigid massive strip
lying on an elastic half-space. Prikl. mat. i mekh. 26 no.6:
1043-1058 N-D '62. (MIRA 16:1)
(Seismic waves) (Elasticity)

ACCESSION NO: AP3004109

S/0040/63/027/004/0618/0628

AUTHOR: Flitman, I. M. (Moscow)

TITLE: Waves generated by instantaneous explosion in continuous elastic media

SOURCE: Prikladnaya matematika i mekhanika, v. 27, no. 4, 1963, 618-628

TOPIC TAGS: instantaneous explosion, wave propagation, wave equation, transverse wave front, primary wave, secondary wave, toroidal front

ABSTRACT: The plane problem of wave propagation along the band width ℓ in the x-plane has been studied analytically. The medium is assumed homogeneous prior to the explosion. The wave equations are written under zero initial conditions and at $y = 0$, $-\ell < x < 0$ the boundary conditions are stated as

$$\sigma_{yy}^+ = \sigma_{yy}^-, \quad v^+ = v^-, \quad \tau_{xy}^+ = \tau_{xy}^- = \tau = \text{const} \quad (1)$$

where v is displacement along y axis. The process of explosion is depicted as the growth of a plane transverse wave front with longitudinal and transverse cylindrical wave fronts on the boundaries. From symmetry considerations the right boundary displacement is treated alone as the sum of three waves: primary wave originating

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at the right side, primary wave moving in from left boundary, and secondary waves. The potential functions for longitudinal and transverse primary waves yield respectively

$$\varphi_1(r, 0, t) = \frac{8\sqrt{2}\gamma m_0}{15\pi} \frac{\tau}{a^2 p} \sin 0M(-\gamma \cos \theta) \frac{(at-r)^{3/2}}{\sqrt{r}} \quad (2)$$

$$\psi_1(r, 0, t) = \frac{4\sqrt{2}m_0}{15\pi} \frac{\tau}{b^2 p} \frac{\cos 2\theta}{\cos \theta} K(0) \frac{(bt-r)^{1/2}}{\sqrt{r}} \quad (3)$$

where

$$K(0) = M(-\cos \theta) \quad (0 \leq \theta < \pi - \arccos \gamma) \quad (4)$$

The analysis is extended to the spatial propagation along circular radius ℓ , and it is shown that only asymptotic solutions are possible for this case under special limiting conditions. The propagation is studied as primary transverse and longitudinal waves with toroidal fronts. The analogous equation for toroidal prefront expansion with $at \ll \ell$, $a^2 = \frac{\lambda + 2\mu}{\rho}$, (5)

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ACCESSION NO: AP3004109

gives

$$\omega = \frac{4}{3\pi} \frac{r_0 \sin^2 \alpha \sin \theta / 2}{p b^2 \cos \theta} \frac{(b t - r)^{3/2}}{\sqrt{r}} \quad (6)$$

"The author expresses his gratitude to N. V. Zvolinskiy and A. A. Gvozdev for their help and advice in this work." Orig. art. has 40 equations and 10 figures.

ASSOCIATION: none

SUBMITTED: 01Apr63

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: PH

NO REF SOV: 009

OTHER: 003

Card 3/3

L 25546-66 EWT(1)/EWA(h) GW

ACC NR: AP6005836

SOURCE CODE: UR/0387/55/000/010/0057/0062

AUTHOR: Molotova, L. V.; Flitman, L. M.

ORG: Institute of Physics of the Earth, Academy of Sciences, SSSR (Institut fiziki Zemli Akademii nauk SSSR)

TITLE: Displacements in an elastic medium caused by a plastic wave

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 10, 1965, 57-62

TOPIC TAGS: seismic wave, elastic, ^{oscillation} wave, wave mechanics

ABSTRACT: The authors consider elastic oscillations on the external surface of a sphere with a radius which increases according to a given law (with the velocity of the longitudinal waves at the initial moment and then gradually decreasing in speed). The constant normal stresses on the surface of the sphere are given. The moving spherical surface simulates a plastic wave front. The radiated elastic wave is studied as a function of the form of the hodograph for the plastic wave. Analytical expressions are derived for displacements in the elastic wave assuming an invariable stress at the interface between the elastic and plastic regions. The theoretical results are compared with the solution given by Sharpe (J. A. Sharpe, "The Production of Elastic Waves by Explosion Pressures", Geophys., 7, No 2, 1942). It is shown that there is a difference between the forms of displacements U_1 and U_2 (where the index 1 indicates

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UDC: 534.14:550.834

I 25546-66

ACC NR: AP6005836

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displacements caused by the action of the plastic wave, and the index 2 indicates displacements calculated in conformity with Sharpe's theory). The effect on the plastic wave side is an increase in the duration of U_1 as compared with U_2 due to a less abrupt arrival. This means that the absolute value of the amplitude spectrum S_1 goes further into the low frequency range than S_2 . The experimental data indicate an extremely rapid attenuation of plastic waves with distance from the source. It is suggested that further studies in this field should not be limited to constant stress at the plastic wave front since this condition does not agree with experimental data. In conclusion the authors consider it their pleasant duty to thank N. V. Zvolinskiy and Yu. I. Vasil'yev for discussion of this work. Orig. art. has: 2 figures, 14 formulas.

SUB CODE: 08,20 / SUBM DATE: 18Mar65/ ORIG REF: 006/ OTH REF: 002

Card 2/2

ULR

L 38709-66 EWT(1) GD

ACC NR: AT6016916

(N)

SOURCE CODE: UR/000⁰/65/000/000/0432/0443

AUTHOR: Zvolinskiy, N. V.; Flitman, L. M.; Kostrov, B. V.; Afanas'yev, V. A.

ORG: Institute of Physics of the Earth, AN SSSR, Moscow (Institut fiziki Zemli AN SSSR); Institute of Problems of Mechanics, Academy of Sciences, SSSR (Institut problem mekhaniki Akademii nauk SSSR)

TITLE: Some problems in the diffraction of elastic waves

SOURCE: International Symposium on Applications of the Theory of Functions of Continuum Mechanics. Tiflis, 1963. Prilozheniya teorii funktsiy v mekhanike sploshnoy sredy. t. 1: Mekhanika tverdogo tela (Applications of the theory of functions in continuum mechanics. v. 1: Mechanics of solids); trudy simpoziuma. Moscow, Izd-vo Nauka, 1965, 432-443

TOPIC TAGS: elasticity theory, partial differential equation, integral equation, boundary value problem, approximate solution

ABSTRACT: Three problems are studied: (1) That of waves formed in an elastic medium as a result of momentary disturbance of the continuum along an infinitely long plane strip of finite width. The dynamic equations of elasticity theory are solved under boundary value conditions corresponding to time with initial conditions zero. The problem is shown to be reducible to the Wiener-Hopf problem; (2) The problem of motion under the action of a plane wave of a solid infinite strip in an elastic space. This

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